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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,587	01/22/2004	Dan Mirescu	60130-2002;02MRA0149	3019
26096	7590	08/12/2005	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			WAKS, JOSEPH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/762,587	<b>Applicant(s)</b> MIRESCU, DAN	
	<b>Examiner</b> Joseph Waks	<b>Art Unit</b> 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on Mai 22, 2002. It is noted, however, that applicant has not filed a certified copy of the 02/06213 application as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 8-12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Adam et al. (US 5,528,093).

Adam et al. disclose invention as claimed: a drive shaft 7, an electric motor 1 that rotatably drives the drive shaft, a magnet 7.2 disposed on the drive shaft, a sensor 8 disposed in proximity to the magnet and fixed to a circuit board 4, a removable connector 3 that supports the sensor and carries current to the electric motor the supply contacts (Re column 3, lines 55-64).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2834

5. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adam et al. (US 5,528,093) in view of Santos et al. (US 4,987,415).

Adam et al. disclose the unit essentially as claimed. However, Adam et al. do not disclose the distance between the sensor and the magnet being maximum 4 mm and 2 mm.

Santos et al. disclose a high-resolution encoder with a plurality of North and South poles for a various automotive applications with a distance of between the magnet and the sensor of 0.036 inches or approximately 1 mm to provide high-resolution output signals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the unit as taught by Adam et al. and to provide the encoder having the distance less than 2 mm or 4 mm as taught by Santos et al. for the purpose of providing high-resolution output signals. It would have been further obvious to one having ordinary skill in the art at the time the invention was made to provide the distance of 2 mm between the magnet and the sensor, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claims 7 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Adam et al. (US 5,528,093) in view of Richeson (US 5,300,883).

Adam et al. disclose the unit essentially as claimed. However, Adam et al. do not disclose connection tabs fitted to the sensor to fix the sensor to the circuit board.

Art Unit: 2834

Richeson discloses a position sensor 14 having tabs 16 fixing the sensor to the circuit board 12 for the purpose of sensing the angular position of the shaft 6 relatively to the circuit board.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the unit as taught by Adam et al. And to provide the connection tabs fitted to the sensor to fix the sensor to the circuit board as taught by Richeson for the purpose of sensing the angular position of the shaft 6 relatively to the circuit board.

### ***Response to Arguments***

7. Applicant's arguments filed on June 29, 2005 have been fully considered but they are not persuasive.

Re claims 1, 6, and 8-11.

In response to applicant's arguments, the recitation of the gear reduction unit has not been given patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Moreover, the title of the cited US Patent 5,528,093 and the specification clearly define that the disclosure relates to a gear/drive unit. Since no particular features

Art Unit: 2834

related to the gear structure were recited in the claims, the Adam et al. reference was use appropriately with respect to the gear reduction unit limitation.

Regarding the removable connector supporting a sensor and that carrying current to the motor, examiner directs applicant's attention to Figures 1, 3, and 5 clearly showing elements 3 and 4 that include; the removable connector supporting Hall sensor 8 and the plug receptacle 3.21 for accommodating customer's plug connector that would be recognized by one of ordinary skill in the art as means for carrying the current (from customer's plug) to the motor. Regarding removability of the elements 3 and 4, or the connector, examiner directs applicant's attention to the 1984 issue of Webster's II New Riverside University that defines "clamped" as "gripping" or "supporting", a term that does not contradict the removability of the parts that may be "unclamped" if needed. In view of the above, examiner believes that the rejection based on Adam et al. is appropriate.

Re claims 12 and 14-16.

Regarding the printed circuit board 4 being not housed by the electronic housing 3, examiner directs applicant's attention to the 1984 issue of Webster's II New Riverside University that defines "housed" as ""to serve as cover" and the housing 3 serves as a cover for the printed board 4. There is no limitation in the claim requiring the board to be located in the housing.

Regarding the sensor 8, Figure 1 clearly shows the sensor perpendicularly offset the plane formed by the printed circuit board 4. The 1984 issue of Webster's II New Riverside University defines "offset" as "a short distance measured perpendicularly from

Art Unit: 2834

the main line". One of ordinary skills in the art would clearly recognize in Figure 1 the sensor 8 located a short distance perpendicularly from the plane formed by the printed circuit board, and as such meets the claimed limitation.

Finally, the electronic gear housing meets the definition of "case" that is also defined by the 1984 issue of Webster's II New Riverside University as a "container" or a "framework", and the fact that it is open on both sides does not contradict the claimed limitation of "case".

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (571) 272-

Art Unit: 2834

2037. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Waks  
Primary Examiner  
Art Unit 2834

8/10/05